AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. The following listing provides the amended claims with the amendments marked with deleted material crossed out and new material underlined to show the changes made.

Claims 1-35 (Canceled).

36. (Currently Amended) An integrated circuit comprising:

at least one metal layer comprising at least one thousand ~~two pairs of~~ conductors effectively deposed in an effective preferred direction to interconnect one or more points within ~~on~~ the integrated circuit, the effective preferred direction comprising a direction for at least forty percent of the conductors on the metal layer; ~~wherein a conductor comprises one or more wires, each wire being a continuous segment deposed in a single direction,~~

each particular conductor ~~pair of conductors~~ comprising:

a first wire deposed in a first Manhattan direction relative to the boundaries of the integrated circuit, the first wire comprising ~~a first wire length including~~ first and second ends;

a second wire deposed in a second Manhattan direction relative to the boundaries of the integrated circuit, the first Manhattan direction being different than the second Manhattan direction, the second wire comprising ~~a second wire length including~~ first and second ends, the first end of the second wire being coupled to the second end of the first wire;

wherein each wire being a continuous segment deposed in a single direction; and

wherein, ~~an~~ the effective ~~wiring~~ preferred direction of ~~the pairs of conductors~~ a particular conductor comprises an angle, A, measured relative to the boundaries of the integrated circuit, defined by the expression Tan A = Y/X,

wherein, Y comprises a line segment with a distance starting from the second end of the second wire ~~in the last conductor pair~~ and ending at an intersection with a line segment propagated from the first end of the first wire and in the direction of the first wire, and X comprises a distance, measured in the direction of the first wire, starting from the first end of the first wire and ending with the intersection of the Y line segment.

37. (Original) The integrated circuit as set forth in claim 36, wherein the first Manhattan direction comprises a horizontal direction and the second Manhattan direction comprises a vertical direction.

38. (Original) The integrated circuit as set forth in claim 36, wherein the first Manhattan direction comprises a vertical direction and the second Manhattan direction comprises a horizontal direction.

39. (Original) The integrated circuit as set forth in claim 36, wherein the first wire length equals the second wire length so as to simulate an effective direction of 45 degrees.

40. (Original) The integrated circuit as set forth in claim 36, wherein the ratio of the first wire length to the second wire length equals three to two, so as to simulate an effective wiring direction of 60 degrees.

41. (Original) The integrated circuit as set forth in claim 36, wherein the metal layer comprises a plurality of independent conductors deposed in parallel.

Claims 42-47 (Canceled).

48. (New) An integrated circuit (IC) comprising:

a metal layer;

a set of at least ten routes on said metal layer;

each particular route formed by two sets of wire segments that alternate along only two directions, each set of wire segments only having wire segments along one of said two directions, wherein said two directions are approximately perpendicular, wherein a ratio of the length of wire segments along one direction to the length of wire segments along the other direction is approximately equal for all said routes, wherein said ratio is selected such that said routes effectively traverse along said metal layer in a particular effective direction.

49. (New) The IC of claim 48, wherein said set of at least ten routes on said metal layer comprises 1000 routes.

50. (New) The IC of claim 48, wherein the first and second routes are parallel in that each of a set of wire segments in the first route is parallel to at least one wire segment in the second route.